

NEW SPECIES OF APION AND APTEROMECHUS.

BY H. C. FALL, Tyngsboro, Mass.

About four years ago, the late Edwin A. Bischoff, of Newark, N. J., wishing to put in order his extensive local collection of Apions, sent me representatives of all species taken by him in northern New Jersey. Mr. Bischoff was a very thorough and painstaking collector who went over as with a fine tooth comb the territory in the vicinity of his home, from the salt meadows of Arlington to the Orange Mts., and it is safe to say that first and last there are not many kinds of beetles inhabiting that area that escaped his search.

I do not now remember how many species of *Apion* there were in his lot, though I believe that was shortly after announced when he brought his box of neatly arranged specimens to a meeting of the New York Entomological Society, and spoke of his success in finding these little weevils. As for myself, I was not a little surprised to find in his sending three undescribed species, all belonging to the first group of the genus, which is characterized by its simple claws and generally distinctly modified front thighs of the male. Descriptions of these three species have been drawn up for some time, and it is fitting that their publication should not be longer delayed. With them I include descriptions of two new species of *Apteromechus* from Florida and Texas. The types of these species are all contained in the writer's collection.

Apion dilaticolle n. sp.

Moderately elongate, black throughout, the base of the antennae picescent; pubescence extremely sparse and fine, surface moderately shining. Beak (♂) scarcely equal in length to the head and prothorax, dilated before the base, sparsely finely punctate and finely strigose, the extreme apex polished; in the female a little more slender, scarcely dilated at base, sculpture a little finer as usual, very little longer than in the male. Prothorax stout, subrotundate, as wide (♂) or a little wider (♀) than long; surface coarsely closely punctate, median impressed line subentire. Elytra elongate oval, about $\frac{3}{5}$ wider than the prothorax and $\frac{3}{5}$ longer than wide; humeri moderate, intervals flat, each with a more or less regular series of small punctures. Ventral segments rather coarsely and closely punctate.

Length 2.3 mm.; width about .9 mm.

Male.—Front thighs only feebly dilated, the swollen area completely very finely and closely striate and without evident inferior limiting ridge; middle tarsi with small terminal mucro, hind tibiae not visibly mucronate; other characters as usual in the group.

New Jersey.

I have seen a short series of this species collected by Bischoff at Montclair and Ramsey, and others taken at Oradell by Nicolay. The type is a male from Montclair.

This species must be placed next to *pennsylvanicum* by my table,¹ differing by its larger thorax, more evenly oval elytra, coarsely punctured ventral surface and close striation of the femoral swelling in the male.

Apion bischoffi n. sp.

A. atripes Fall (Trans. Am. Ent. Soc., 1898, p. 116) nec Smith (Trans. Am. Ent. Soc., 1884, p. 49).

More closely allied to the preceding species than to any other, the prothorax being almost as robust, the form and length of the beak and the general sculpture of the body being about the same. The elytra are relatively broader, and when viewed in profile the hinder body is seen to be very distinctly shorter and more convex in the present species than in the preceding. The front femora are similarly gradually swollen, the smooth area polished and with very fine less approximate striae, about eight in number, the inferior limiting ridge well developed. As in *dilaticolle* the hind tibiae are not visibly mucronate at apex.

The type of this species is a male collected by Bischoff at Montclair, New Jersey; its dimensions are: length 2 mm., width .85 mm. Other localities in the series before me are Rahway and Woodside, New Jersey; Staten Island, New York; Matthias Point and Fredericksburg, Virginia.

As indicated above, this is the species which I regarded as *atripes* Smith in my synopsis of the genus. I had not seen the Smith collection at that time, the determination being based on specimens so named in the Horn and Hubbard and Schwarz collections, which had formed a part of the material used by Smith in the preparation of his Synopsis of *Apion* in 1884. I have lately had the opportunity of inspecting the Smith collection and

¹ Trans. Am. Ent. Soc., 1898, p. 111.

find there three specimens of *atripes*, all from Georgia. This was the first locality named by Smith for his species, and these three examples must, I suppose, be considered the types. They are not precisely alike and perhaps represent two closely allied species, but as all are females it is difficult to characterize them definitely. Certainly they are quite different from the present species, being smaller and with the normally rather small thorax of the group.

***Apion diffractum* n. sp.**

Very similar to but slightly more robust than *finitimum*, to which it is most nearly allied. Black, legs brownish piceous varying to brownish red. Beak somewhat shorter than the head and thorax in the male, with the apical third polished, basal dilatation rather strong, second joint of antennae reaching the eye. In the female the beak is as usual a little longer, more slender, scarcely dilated before the base, and more finely sculptured. Prothorax as long as or slightly longer than wide, base slightly wider than apex, sides a little prominent at middle, surface closely punctate, dorsal line fine, not entire. Elytra with moderate humeri, rather strongly inflated behind, surface shining, often with slight purplish gloss, intervals flat; pubescence nearly wanting; ventral punctuation moderately fine. In the males the front thighs have a strong though rounded tuberculiform swelling on the inner side, the inferior face of the swelling very densely finely striate; inferior limiting ridge strong; front tibiae almost as strongly but more gradually widened apically than in *finitimum*. Length 1.5 to 2 mm., width .75 to .85 mm.

The type is a male, and one of a series of specimens taken by Mr. Bischoff on the salt meadows at Arlington, New Jersey, in February and March. A single example from Montclair, N. J., and one each from Cambridge, Mass., and Coeur d'Alene, Idaho, complete the series before me. The Cambridge specimen was previously placed with *finitimum* and recorded as such in my revision of the genus.

The present species and *finitimum* differ from all our other species of Group I by the strongly widened front tibiae of the male. In both, the femoral prominence is strong, but in *finitimum* the lower surface of the swelling is more finely and less closely striate, the area being distinctly shining, while in *diffractum* it is dull from the extreme density of the striae.

Apteromechus microstictus n. sp.

Similar in general aspect to *A. ferratus*, with which it has been hitherto confused. As compared with *ferratus* the present species is a little smaller and slightly narrower. In *ferratus* elytral intervals 3-5-7 are noticeably but not conspicuously convex, and on these—more especially the third—the scales are dark brown alternating with patches of yellowish white, the latter five in number, but with the subbasal and subapical patches usually smaller and often indistinct. In *microstictus*, intervals 3-5-7 are conspicuously elevated, the spots of whitish scales are replaced by a single white scale arising from the midst of smaller condensations of dull yellow scales of the same tint as those of the noncarinate intervals, while the dark brown scales of the alternating areas are much fewer in number, being reduced to a single or an irregularly double line. The coarse very dense punctures of the pronotum are even a little coarser in *microstictus*, and show a tendency to coalesce to form oblique channels, which is scarcely the case in any examples of *ferratus* before me. Length 2.9 to 2.95 mm.; width 1.3 mm. (for *ferratus* 3.6 by 1.75 mm.).

Apteromechus texanus n. sp.

This name is proposed for a Texan form which is closely related to *microstictus*, and of which it may possibly be a variant. It agrees with *microstictus* in its distinctly carinate elytral intervals and in pronotal sculpture, but the scales of the slightly condensed patches along the elevated intervals are practically uniformly dull yellow, and the ventral punctation is noticeably coarser and sparser. In *microstictus* there are two to three transverse rows of coarse punctures on ventral segments 3 and 4, while in *texanus* there is only a single complete transverse row with some smaller punctures forming a partial second series. On these two segments the number of punctures is sensibly twice as great in *microstictus* as in *texanus*. Length 3.2 mm., width 1.35 mm.

Brownsville, Texas. A single example only, collected by Professor Wickham.